

ABSTRACT

In a known wavelength multiplexer, optical signals to pass are passed with their wavelengths held identical. Therefore, unless an unused wavelength common to all zones exists in case of setting an optical channel, the channel cannot be set. According to the present invention, a drop/add type wavelength multiplexer includes a wavelength converting section (50 in Fig. 5) which converts the wavelengths of optical signals to pass from the input side of the multiplexer to the output side thereof. In a network employing the wavelength multiplexers at individual nodes, a new optical channel can be easily set by utilizing wavelengths not used at the nodes.